

**REMARKS**

Claims 2-15 are pending in this application. Claims 10 and 11 are withdrawn from consideration. By this Amendment, the title and claims 2-7 are amended, and claims 1, 8, and 9 are canceled without prejudice or disclaimer. Also by this Amendment, new claims 12-15 are added, where new claim 12 recites features recited in canceled claim 1 and new claim 14 recites features similar to those recited in canceled claim 9. Support for the amendment of the claims may be found in at least Figs. 1A-B, 2, 3, 8, 9, 13A-B, 14, and 15, and corresponding disclosures, such as paragraphs [0066]-[0068], [0084], [0088], and [0118] of the patent publication (U.S. Patent Publication No. 2004/0090704) that corresponds to this application. No new matter is added. Reconsideration of the application is respectfully requested.

**I. Formal Matters**

The Office Action objects to the Specification because the title of the invention is not descriptive. Applicants hereby amend the title of the invention to be more descriptive of the invention. Accordingly, Applicants respectfully request the withdrawal of the objection to the Specification.

The Office Action rejects claim 5 under 35 U.S.C. § 112, second paragraph, as being indefinite. Claim 5 is amended to overcome the rejection. Accordingly, Applicants respectfully request the withdrawal the rejection of the claims.

**II. Claims Define Patentable Subject Matter**

The Office Action rejects claims 1-9 under 35 U.S.C. § 102(b) as being anticipated by Sato et al. (Japanese Patent Publication No. 2002-208114; hereinafter *Sato*). As previously noted, claims 1, 8, and 9 are canceled, and new independent claim 12 recites features recited in canceled claim 1. Therefore, Applicants respectfully traverse the rejection of claims 2-7 with reference to new independent claim 12.

Specifically, with respect to new independent claim 12, Applicants assert that *Sato* does not disclose or suggest a perpendicular magnetic recording head including at least a yoke layer, a pole layer, an auxiliary pole layer disposed on a medium-outgoing side of the pole layer so as to be recessed from a recording-medium-facing surface and spaced from the yoke layer, and a non-magnetic layer disposed between the pole layer and the auxiliary pole layer in a region where the pole layer and the auxiliary pole layer face each other, as recited in independent claim 12.

In contrast, *Sato* discloses a thin film magnetic head having first and second magnetic layers 8 and 14 separated by a gap layer 9 (*Sato*, Abstract), in which second magnetic layer 14 has a magnetic pole part layer 14A and yoke part layers 14B1 and 14B2 (*Sato*, col. 6, lines 11-12). *Sato* discloses that pole layer 14A is separated from first magnetic layer 8 by an insulating layer 9C, and the two yoke part layers 14B1 and 14B2 are partially separated by pole layer 14A and fully separated by a non-magnetic layer 15 (*Sato*, Fig. 36). However, *Sato* does not disclose a secondary pole layer. Accordingly, *Sato* fails to disclose an auxiliary pole layer disposed on a medium-outgoing side of a pole layer so as to be recessed from a recording-medium-facing surface and spaced from a yoke layer, as recited in independent claim 12. Therefore, Applicants respectfully assert that *Sato* does not disclose or suggest a perpendicular magnetic recording head as recited in independent claim 12.

In accordance with the above remarks, Applicants submit that independent claim 12 defines patentable subject matter. Claims 2-7 directly or indirectly depend from claim 12, and therefore, also define patentable subject matter, as well as for the additional features they recite. Thus, Applicants respectfully request the withdrawal of the § 102(b) rejection of claims 2-7.

Next, with respect to new independent claim 14, which recites features recited in canceled claim 9. Applicants assert that *Sato* does not disclose or suggest a perpendicular

magnetic recording head including at least a yoke layer disposed so as to be recessed from a recording-medium-facing surface facing a recording medium moving in a predetermined direction of medium movement, wherein the yoke layer includes a connecting portion having a uniform width larger than a width of a pole uniform width portion and smaller than a width of a pole widening portion and a yoke widening portion having a width larger than the width of the connecting portion, and where the connecting portion is closer to the recording-medium-facing surface relative to the yoke widening portion, as recited in independent claim 14.

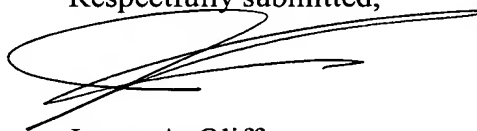
*Sato* teaches that a yoke partial layer 14B has a width larger than the width of pole layer 14A, which enlarges the contact area between yoke partial layer 14B and pole layer 14A to prevent the saturation of the magnetic flux (*Sato*, Figs. 1 and 2; ¶¶ [0097] and [0098] of the English translation). However, *Sato* does not disclose that yoke partial layer 14B includes a connecting portion (e.g., *Sato*, Fig. 36, connecting portion between pole layer 14A and yoke layer 14B1) having a uniform width larger than a width of a pole layer uniform width portion 14A1 and smaller than a width of a pole layer widening portion 14A2 and a yoke widening portion having a width larger than the width of the connecting portion, and where the connecting portion is closer to the recording-medium-facing surface relative to the yoke widening portion. Accordingly, *Sato* fails to disclose a perpendicular magnetic recording head as recited in independent claim 14. In accordance with the above remarks, Applicants submit that independent claim 14 defines patentable subject matter. Claim 15 depends from claim 14, and therefore, also defines patentable subject matter, as well as for its additional recited features.

**III. Conclusion**

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration of claims 2-7 and prompt allowance of claims 2-7 and 12-15 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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